WHAT IS CLAIMED IS:

1. An isolated antisense oligonucleotide consisting essentially of 10 to 50 nucleotides, wherein said oligonucleotide specifically hybridizes within an accessible region of TASK-3 mRNA, said region defined by nucleotides 99 through 112, 149 through 166, 197 through 207, 217 through 236, 290 through 300, 314 through 327, 448 through 462, 526 through 539, 710 through 742, 852 through 868, 896 through 910, 996 through 1028, 1042 through 1054, 1170 through 1183, or 1278 through 1296 of SEQ ID NO:1, and wherein said oligonucleotide inhibits the production of TASK-3.

2. A composition comprising the isolated antisense oligonucleotide of claim 1.

3. The composition of claim 2, wherein said composition comprises a plurality of isolated antisense oligonucleotides, wherein each antisense oligonucleotide specifically hybridizes within a different accessible region.

4. An isolated antisense oligonucleotide consisting essentially of 10 to 50 nucleotides, wherein said oligonucleotide specifically hybridizes within an accessible region of TASK-3 mRNA, said region defined by nucleotides 55 through 70, 101 through 156, 163 through 194, 226 through 240, 305 through 322, 434 through 443, 481 through 489, 500 through 512, 515 through 524, 540 through 557, 595 through 615, 641 through 658, 685 through 696, 700 through 711, 775 through 786, 791 through 806, 829 through 837, 929 through 947, 998 through 1013, 1088 through 1102, or 1108 through 1116 of SEQ ID NO:2, and wherein said isolated antisense oligonucleotide inhibits the production of TASK-3.

5. The isolated antisense oligonucleotide of claim 4, wherein said oligonucleotide comprises a modified backbone.

6. The isolated antisense oligonucleotide of claim 4, wherein said oligonucleotide comprises one or more non-natural internucleoside linkages.

7. The isolated antisense oligonucleotide of claim 4, wherein said oligonucleotide is an oligonucleotide analog.

8. The isolated antisense oligonucleotide of claim 4, wherein said oligonucleotide comprises one or more substituted sugar moieties.

9. The isolated antisense oligonucleotide of claim 4, wherein said oligonucleotide comprises nucleotide base modifications or nucleotide base substitutions.

10. A composition comprising the isolated antisense oligonucleotide of claim 4.

11. The composition of claim 10, wherein said composition comprises a plurality of isolated antisense oligonucleotides, wherein each antisense oligonucleotide specifically hybridizes within a different accessible region.

12. A nucleic acid construct comprising a regulatory element operably linked to a nucleic acid encoding a transcript, wherein said transcript specifically hybridizes within one or more accessible regions of TASK-3 mRNA in its native form.

13. A host cell comprising the nucleic acid construct of claim 12.

14. An isolated antisense oligonucleotide that specifically hybridizes within an accessible region of TASK-3 mRNA in its native form, wherein said antisense oligonucleotide inhibits production of TASK-3.

15. A method of decreasing production of TASK-3 in cells or tissues, comprising contacting said cells or tissues with an antisense oligonucleotide that specifically hybridizes within an accessible region of TASK-3.

16. A method for modulating pain in a mammal, said method comprising administering the isolated antisense oligonucleotide of claim 14 to said mammal.

17. A method of identifying a compound that modulates pain in a mammal, the method comprising:

contacting cells comprising a TASK-3 nucleic acid with a compound; and

detecting the amount of TASK-3 RNA or TASK-3 polypeptide in or secreted from said cell,

wherein a difference in the amount of TASK-3 RNA or TASK-3 polypeptide produced in the presence of said compound compared to the amount of TASK-3 RNA or TASK-3 polypeptide produced in the absence of said compound is an indication that said compound modulates pain in said mammal.

18. The method of claim 17, wherein the amount of said TASK-3 RNA is determined by Northern blotting.

19. The method of claim 17, wherein the amount of said TASK-3 polypeptide is determined by Western blotting.

20. The method of claim 17, wherein said compound is an antisense oligonucleotide that specifically hybridizes within an accessible region of TASK-3 mRNA in its native form, wherein said antisense oligonucleotide inhibits production of TASK-3.

21. A method for modulating pain in a mammal, said method comprising administering a compound to said mammal, wherein said compound modulates the expression of TASK-3.

22. The method of claim 21, wherein said compound is an antisense oligonucleotide that specifically hybridizes within an accessible region of TASK-3 mRNA in its native form, wherein said antisense oligonucleotide inhibits production of TASK-3.

23. The method of claim 21, wherein said pain is from diabetic neuropathy, postherpetic neuralgia, fibromyalgia, surgery, or chronic back pain.